

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

What is claimed is:

1. (Original) An image processing apparatus for processing plural pages of a job to be given to an output device, the image processing apparatus comprising:

a decision controller for deciding whether plural pages of image data included in the job are data within a color reproduction range of the output device or not; and

a color compressing controller for performing a color compression process uniformly to all of the plural pages of image data in accordance with the decision of the decision controller so as to supply the processed data to the output device.

2. (Original) The image processing apparatus according to claim 1, wherein the decision controller performs the decision for each of the plural pages, and the color compressing controller determines a parameter to be used for the color compression by integrating the decision result of the decision controller about the all pages.

3. (Original) the image processing apparatus according to claim 2, wherein the decision controller performs the decision for each of the sections of a color space, and the compressing controller performs the color compression for each of the sections.

4. (Original) The image processing apparatus according to claim 1, wherein the decision controller performs the decision for each of the sections of a color space, and the compressing controller performs the color compression for each of the sections.

5. (Original) The image processing apparatus according to claim 1, wherein the output device is a printer for printing an image in accordance with the image data, and the image processing apparatus is built in the printer.

6. (Original) The image processing apparatus according to claim 1, wherein the image data are generated by an image reader, and the image processing apparatus is built in the image reader.

7. (Original) An image processing method for processing plural pages of a job to be given to an output device, the method comprising:

a decision step of deciding whether plural pages of an image data included in the job are data within a color reproduction range of the output device or not; and

a color compression step of performing a color compression process uniformly to all of the plural pages of image data in accordance with a decision in the decision step so as to supply the processed data to the output device.

8. (Original) the image processing method according to claim 7, wherein the decision step includes a page decision step of deciding whether the image data of each page are data within a color reproduction range of the output device or not and a step of repeating the page decision step over all of the pages, and the color compression step includes a determining step of determining a parameter to be used for the color compression by integrating the decision result in the decision step about the all pages and a step of performing the color compression uniformly to all pages using the parameter that was determined in the determining step.

9. (Original) The image processing method according to claim 8, wherein the decision is performed in the decision step for each of the sections of the color space, and the color compression is performed in the compression step for each of the sections.

10. (Original) The image processing method according to claim 7, wherein the decision is performed in the decision step for each of the sections of the color space, and the color compressions is performed in the compression step for each of the sections.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 103

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki et al. (USPN 5,828,780) in view of Ito et al. (USPN 5,884,120). The Examiner maintains that Suzuki et al. discloses substantially the claimed invention except for “where a print job comprising plurality of pages and a decision controller for deciding whether plural of pages contains color image data. Ito, in the same field of endeavor for image forming, discloses a print job comprising plurality of pages and a decision controller for deciding whether plural of pages contain color image data (a diction device obtains information on color on a plurality of documents to be reproduced in a sheet of paper from image of the plurality of documents, col. 1, lines 38-58).” The Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify Suzuki et al. as per teachings of Ito et al. because of the following reason: “(1) to prevent the entire color image from losing the color attractiveness due to effect by data of a few pixel data outside the color reproduction range (Suzuki, col. 2, lines 44-52); (2) to allow the system of Suzuki to process job with multiple pages”.

The rejections are respectfully traversed.

Ito et al. teaches that when a color document and a monochromatic document coexist in N documents, a color/monochromatic switching control portion switches whether a copied image is outputted in color or monochromatic. When the color change number is set, for example, to 4 and all documents are color, color copy mode is selected at the time of outputting. Further, when the color change number is set, for example, to 1 and at least one color document is included in four document, a color print is produced. When all documents are monochromatic, a monochromatic print is produced.” In other words, Ito et al. teaches an image forming apparatus for deciding whether each document is a color document or a monochromatic document in order

to output plural documents on a sheet of paper. Accordingly, for a N-in-1 (image forming) mode for forming one image of N documents (i.e., N separate images are in 1 output document), it is decided whether a color print is produced or a monochromatic print is produced for each sheet of paper outputted in the 4-in-1 mode. Additionally, according to Ito et al., in the case of individual output over plural pages, it is switched whether a copied image is outputted in color or monochromatic depending on respective characteristics of documents.

As admitted by the Examiner, Suzuki et al. does not disclose or suggest including an input image in a color reproduction range of an output device in view of the color reproduction range of an image of plural pages.

Also, none of the cited references discloses or suggests the idea (of the present application) of deciding a color reproduction range of plural color documents to reproduce an image in a common color in an input document and an output paper even if a paper to which an image is outputted is changed. In addition, none of the cited references discloses or suggests a “decision controller” for deciding whether or not plural pages of image data included in a job are data within the color reproduction range of the output device and in particular, a “color compressing controller” for *performing a color compressing process uniformly to all of the plural pages of image data in accordance with the decision*, as recited in claim 1 and in the steps of claim 7.

Thus, independent claims 1 and 7, as well as dependent claims 2-6 and 8-10, are patentable over Suzuki et al. and Ito et al., considered alone or in combination. Consequently, the allowance of claims 1-10 is respectfully solicited.

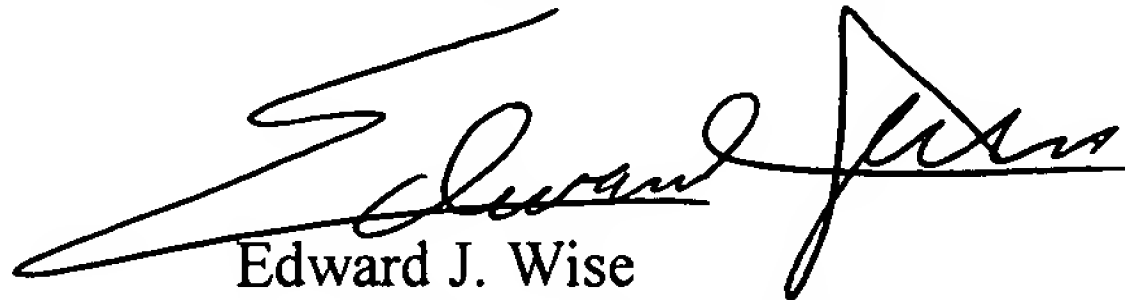
CONCLUSION

Accordingly, it is urged that the application is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Edward J. Wise
Registration No. 34,523

600 13th Street, NW
Washington, DC 20005-3096
(202) 756-8000 EJW/dmd
DATE: June 29, 2004
Facsimile: (202) 756-8087